Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at http://about.jstor.org/participate-jstor/individuals/early-journal-content.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

CO-OPERATIVE TOPOGRAPHIC SURVEY OF NEW YORK.

Excellent progress was made during the past summer in extending the topographic survey of New York State. The appropriation by the Legislature for this purpose was $20,000, and the Federal Bureau devoted a like sum to the work, and had immediate charge of it in connection with the general topographic survey of the United States.

During the season just closed mapping was completed of 3,090 square miles, which will be published in fifteen atlas sheets. In addition, primary triangulation for control of future areas was extended over 2,310 square miles. In the course of the topographic mapping careful spirit levels were run for the control of the area surveyed, which aggregated 2,566 linear miles. Dependent on this there were established 103 permanent bench-marks, chiefly bronze or aluminum tablets cemented into masonry structures, and in addition 2,500 temporary bench-marks were established, while the elevations of 8,496 positions were determined. Furthermore, in the course of the mapping 9,006 linear miles of roads were carefully traversed, and their routes exactly indicated upon the maps.

The names of the sheets completely mapped during the past season are derived from the most important villages or cities within their limits, and are as follows, namely:

In the Adirondacks: Long Lake, Saranac Lake, Boonville, and Carthage. *In the Catskills:* Hobart and Richmondville. *East of the Hudson:* Copake. *In central New York:* Batavia, Caledonia, Wayland, Coventry, and Greene. *In western New York:* Chautauqua. *On Long Island:* Setauket and Fire Island sheets.

The drafting of these is well under way, and preliminary photolithographic copies of all will soon be available for distribution in a limited number to such persons as may have immediate use for them.

During the past year the engraving division of the United States Geological Survey has published the following New York sheets: Clyde, Weedsport, Geneva, Genoa, Ovid, Palmyra, Phelps, Sodus Bay, Pultneyville, Clayton, Grindstone, Morrisville, Millbrook, Schunemunk, Newburg, Broadalbin, and Saratoga.

The total result of the topographic surveying to date has been the complete and final mapping of 31,106 square miles, or 64 per cent. of the area of the State, which is 49,170 square miles. Primary triangulation has been extended over unmapped areas aggregating 12,770 square miles. The result of this great survey of the State will be published in an immense topographic map consisting of 264 separate atlas sheets of uniform size. Of these, 132 have been issued, and 44 others are in course of publication.

The drafting on the Boonville sheet of the topographic survey of New York has just been completed, and it represents some unusual topographic features. This sheet depicts the topography of an area of 220 square miles on the western slope of the Adirondacks, in the depression separating them from the elevated plateau land which lies further west and to the north of Rome. The most striking feature of this region is the large number of terraces and broad benchlands which occur at various elevations on either side of the valley of the upper Mohawk River. Their relation to the surrounding country is best stated in connection with an examination of the Carthage sheet, also completed during the past season, and situated northwest of the Boonville sheet and in similar relation to the Adirondacks and the highland to the west thereof. On the former sheet these terraces are best brought out along the valley of the upper Black River.

On the Boonville sheet the lowest notable bench has an elevation of 565 feet, and 60 feet above the broad, alluvial valley which extends from Delta to Northwestern, about 60 miles. This valley will interest engineers who are studying water storage in the State, as it offers possibilities of striking a great storage reservoir and the building of a dam in the narrows two miles below Delta. Such a dam, if erected to the height of 60 feet, would flood an area covering nearly four square miles.

The next terrace is most pronounced immediately west of Delta, with a uniform elevation of 600 feet. Near Westernville are marked terraces with altitudes of 620 and 640 feet. Near Northwestern are a group of terraces and pronounced benches, on the slopes of the hillside, having elevations of 660, 700, 760, 800, 840, and 900 feet. The upland, called to the south of the West Branch of the Mohawk River "Quaker Hill" and to the north thereof "Webster Hill," is comparatively flat-topped, or table-topped. The southernmost table-land has a general summit altitude of 1,280 feet, and the northernmost table-land a general elevation of 1,580 feet.

From the above brief description it is evident that the whole country has been tilted, with the higher elevation toward the north, because corresponding terraces found near the southern portion of the area, and formed probably at the same time, are at much lower altitudes than the same terraces to the north. All these benches and table-lands tilt with an inclination of about 300 feet in six miles, and these facts will give some interesting food for thought and discussion when the map is critically examined by geologists.

On the eastern portion of this area, that which drains from the Adirondacks toward Mohawk River, the most interesting topographic feature is the manner in which certain brooks have eroded wide channels of uniform slope as they approach with steep descent the valley of the Mohawk. Immediately east of Delta are two streams unnamed which, commencing at an elevation of 900 feet, have eroded channels an eighth of a mile wide, with perfectly smooth, uniform slope to an elevation of 600 feet, after which they pursue their course with varying grades to the Mohawk River. The margins of these wide stream valleys have very steep, bluff slopes, cut with almost knife-like edges straight down to the flat bottom-land. Better examples, even, of this peculiar form of erosion are to be found on the headwaters of Big Brook, above Branchville, and immediately north of Northwestern on Stringer Brook.

A critical examination of the Carthage sheet, drafting on which is still in progress in the office of the United States Geological Survey, gives an idea of the very interesting topographic feature which will be developed in the highland southwest of Carthage and north of Rome when it has been completely mapped. This is a little-known region, and one of which the general maps give an inaccurate conception. Topographically, this region differs radically from the Adirondack country and from the great upland of southern central New York. It is a high, elevated plateau region, covered in large part with a dense growth of timber and largely submerged in swamp. Much of this area was lumbered over in the early days, and is now grown up with second growth, and it is exceedingly inaccessible, the old log roads being tangled with underbrush. The streams of this area abound in trout, and the topographers found the best trout fishing and deer hunting in the State in this area. The northern slopes of this upland, which are shown on the Carthage sheet, have accentuated upon them the terrace and table-land features which were prominently outlined in the upper Mohawk valley near Boonville. The drainage on the Carthage area is northward and eastward toward Black River. The valley of the latter in the neighbourhood of Carthage is broad and level. At Carthage, above the falls, the altitude is 730 feet. This same elevation is maintained for six miles to above the junction of Beaver River. From the map it would appear that a great dam might be built across the Black River just above the falls below Carthage, with a height of about 50 feet, which would store water over an area of probably twenty square miles, backing the water up to within a few miles of Lowville. Above the Carthage bottom-land and to the southwest thereof up the slope of the highland, the first marked terrace has a height of 812 feet, and is over a mile in width. Immediately above it is a second terrace, with an altitude of 920 feet and about one-half mile in width. Two miles further back is a pronounced terrace, with an altitude of 1,220 feet, which is over two to four miles in width. This terrace holds this uniform altitude for a distance of over twenty miles northwest and southeast. The next high terrace is less pronounced, its summit being more highly eroded, and its altitude about 1,450 feet.

Above this the country slopes with almost uniform rise for six or eight miles to the summit of the upper-land, which has a comparatively uniform elevation of nearly 2,000 feet. An interesting feature of the terraces on the north slope of this highland is that they have a nearly uniform elevation throughout their extent, showing that there has been little inclination in an east and west direction since their formation, the whole inclination having been toward the southwest, as developed in connection with an examination of the Boonville area. H. M. W.

THE CATTLE INDUSTRY IN THE UNITED STATES.

The rise in the price of beef during the autumn of 1901 turned public attention in the United States in a rather sudden way towards the beef cattle industry. Questions began to be asked regarding the future price of beef, and this brought up the whole problem of the numbers of cattle in the United States, the availability of pasture lands, and the relation of supply and demand in the beef market. The so-called "Beef Trust" received a large share of the blame for raising prices, which in reality were partly due to the drought of the summer of 1901, the resulting heavy shipments of cattle to market, and the high price of corn as fodder in the months that followed. One of the clearest and best expositions of the present state of affairs as regards "The American Ox and his Pasture" is found in the *Review of Reviews* (New York) for January,